

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA M\DATA\BM121517\
 Data File : BM013468.D
 Acq On : 16 Dec 2017 08:48
 Operator : SJ/JU
 Sample : I6775-07 5X
 Misc :
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 F9A10

Manual Integrations
 APPROVED

Sohil
 12/18/2017 2:09:57 PM

Quant Time: Dec 18 10:56:28 2017
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM113017.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Sat Dec 16 00:23:08 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.68	152	259948	20.00	ng/ul	0.00
18) Naphthalene-d8	10.50	136	1178998	20.00	ng/ul	0.05
35) Acenaphthene-d10	14.33	164	718888m	20.00	ng/ul	0.01
61) Phenanthrene-d10	17.13	188	1420673m	20.00	ng/ul	0.07
75) Chrysene-d12	21.27	240	1052448m	20.00	ng/ul	0.02
83) Perylene-d12	23.49	264	882032m	20.00	ng/ul	0.00

System Monitoring Compounds

3) 1,4-Dioxane-d8	3.23	96	2213	0.42	ng/uL	0.00
5) Phenol-d5	6.85	99	73724	3.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	7.02	67	49409	3.85	ng/ul	0.00
9) 2-Chlorophenol-d4	7.21	132	61321	3.49	ng/ul	0.00
13) 4-Methylphenol-d8	8.38	113	62305	3.24	ng/ul	0.00
19) Nitrobenzene-d5	8.83	128	39813	4.26	ng/ul	0.00
22) 2-Nitrophenol-d4	9.55	143	34658	3.46	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.10	165	64618	3.13	ng/ul	0.02
29) 4-Chloroaniline-d4	10.60	131	163812m	8.64	ng/ul	0.00
43) Dimethylphthalate-d6	13.75	166	217413	3.40	ng/ul	0.01
46) Acenaphthylene-d8	14.02	160	265502m	3.36	ng/ul	0.00
51) 4-Nitrophenol-d4	14.55	143	69453m	6.25	ng/ul	0.01
57) Fluorene-d10	15.33	176	188515m	3.43	ng/ul	0.01
62) 4,6-Dinitro-2-methylphenol	15.53	200	16464m	1.84	ng/ul	0.09
70) Anthracene-d10	17.23	188	263420	3.70	ng/ul	0.06
76) Pyrene-d10	19.49	212	280796m	5.36	ng/ul	0.03
87) Benzo(a)pyrene-d12	23.34	264	175883m	3.91	ng/ul	0.00

Target Compounds

					Ovalue	
11) 2-Methylphenol	8.12	108	103546	6.022	ng/ul	98
16) 4-Methylphenol	8.45	108	161599	8.788	ng/ul	95
24) 2,4-Dimethylphenol	9.65	107	686133m	30.324	ng/ul	
28) Naphthalene	10.51	128	56298487m	928.128	ng/ul	
34) 2-Methylnaphthalene	12.14	142	21782932m	477.714	ng/ul	
40) 1,1'-Biphenyl	13.16	154	9107373	149.899	ng/ul	99
47) Acenaphthylene	14.05	152	2033564	27.836	ng/ul#	94
49) Acenaphthene	14.40	153	29980667m	602.430	ng/ul	
53) Dibenzofuran	14.73	168	25747077m	350.451	ng/ul	
55) 2,3,4,6-Tetrachlorophenol	14.97	232	247115	15.689	ng/ul#	76
58) Fluorene	15.39	166	28233764m	464.538	ng/ul	
68) Pentachlorophenol	16.80	266	11808012	1108.521	ng/ul	97
69) Phenanthrene	17.13	178	56648939m	701.873	ng/ul	
71) Anthracene	17.25	178	16442584m	199.304	ng/ul	
72) Carbazole	17.50	167	12899182	181.777	ng/ul	96
74) Fluoranthene	19.15	202	38120896m	385.413	ng/ul	
77) Pyrene	19.51	202	33501709m	523.962	ng/ul	
80) Benzo(a)anthracene	21.26	228	13818785m	206.945	ng/ul	
82) Chrysene	21.32	228	12016938m	193.976	ng/ul	
85) Benzo(b)fluoranthene	22.83	252	5644642m	94.933	ng/ul	
86) Benzo(k)fluoranthene	22.87	252	1761115m	31.474	ng/ul	
88) Benzo(a)pyrene	23.39	252	3195742m	59.832	ng/ul	
89) Indeno(1,2,3-cd)pyrene	25.71	276	846769m	15.978	ng/ul	

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA M\DATA\BM121517\
Data File : BM013468.D
Acq On : 16 Dec 2017 08:48
Operator : SJ/JU
Sample : I6775-07 5X
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9A10

Manual Integrations
APPROVED

Sohil
12/18/2017 2:09:57 PM

Quant Time: Dec 18 10:56:28 2017
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION
QLast Update : Sat Dec 16 00:23:08 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) Dibenzo(a,h)anthracene	25.72	278	249764m	5.535	ng/ul	
91) Benzo(g,h,i)perylene	26.40	276	628110m	15.025	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

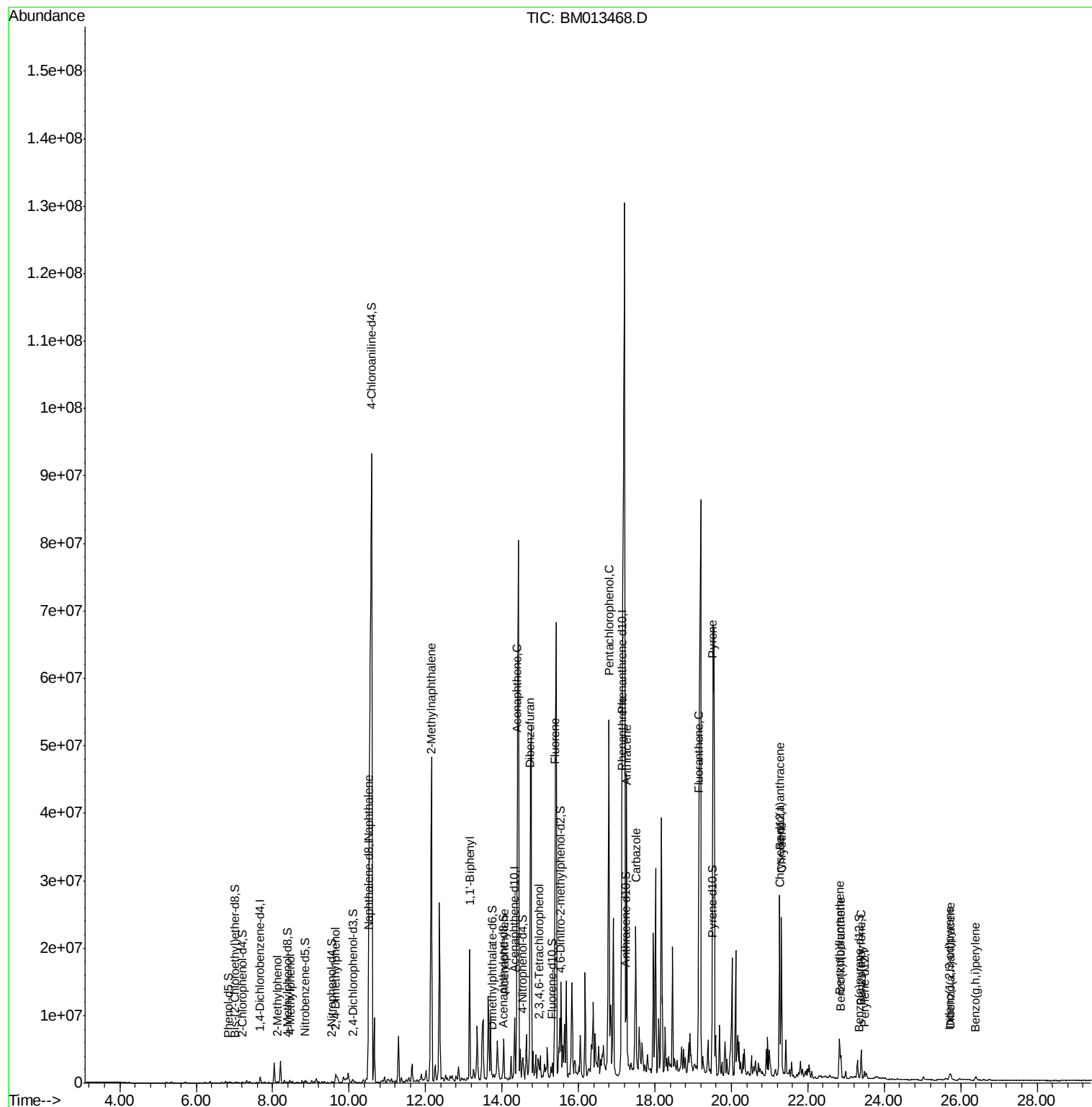
Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM121517\
Data File : BM013468.D
Acq On : 16 Dec 2017 08:48
Operator : SJ/JU
Sample : I6775-07 5X
Misc :
ALS Vial : 25 Sample Multiplier: 1

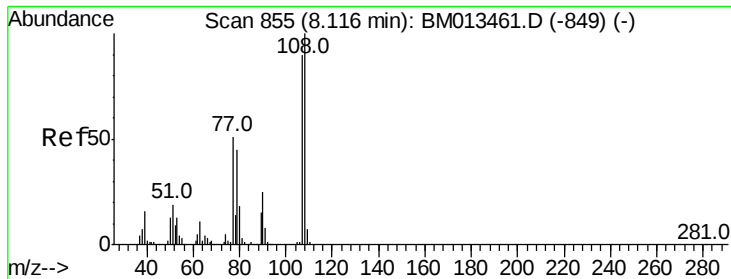
Instrument :
BNA_M
ClientSampleId :
F9A10

Manual Integrations
APPROVED

Sohil
12/18/2017 2:09:57 PM

Quant Time: Dec 18 10:56:28 2017
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION
QLast Update : Sat Dec 16 00:23:08 2017
Response via : Initial Calibration





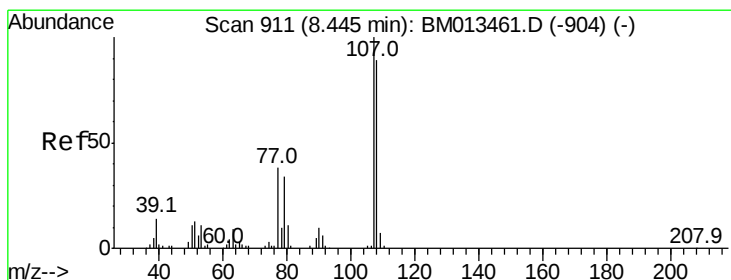
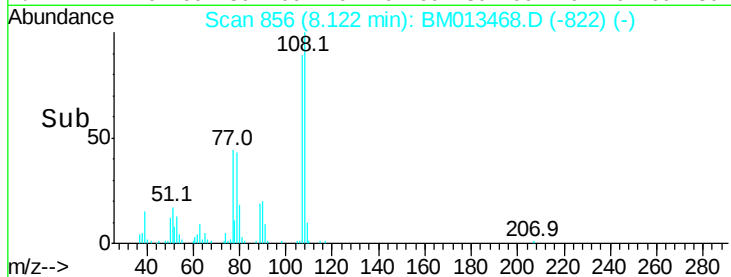
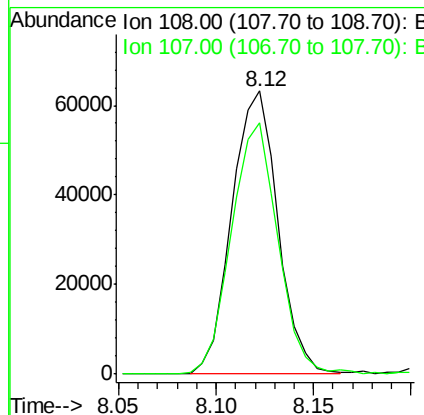
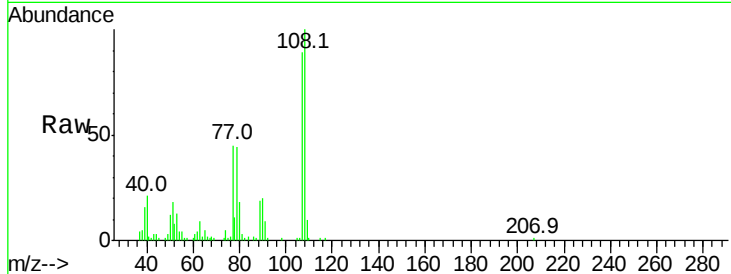
#11
2-Methylphenol
Concen: 6.022 ng/ul
RT: 8.12 min Scan# 856
Delta R.T. 0.00 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Instrument :
BNA_M
ClientSampled :
F9A10

Tot Ion	Ratio	Lower	Upper
108	100		
107	88.7	72.6	108.8

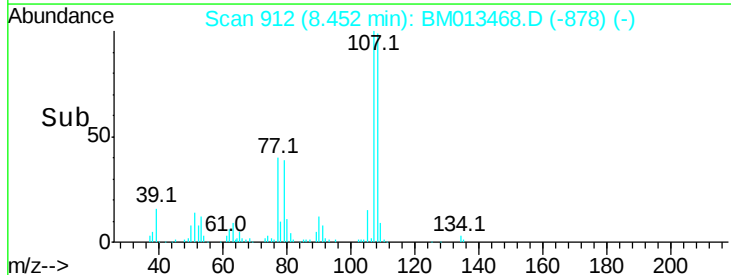
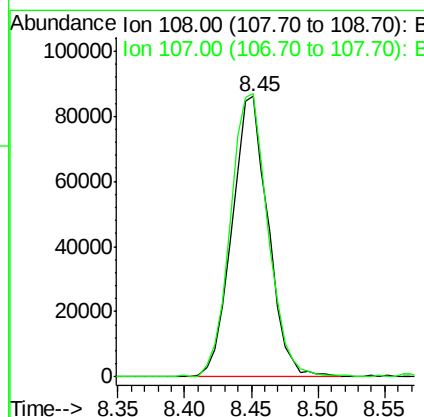
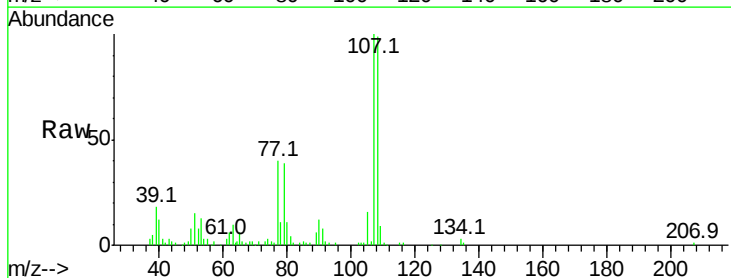
Manual Integrations
APPROVED

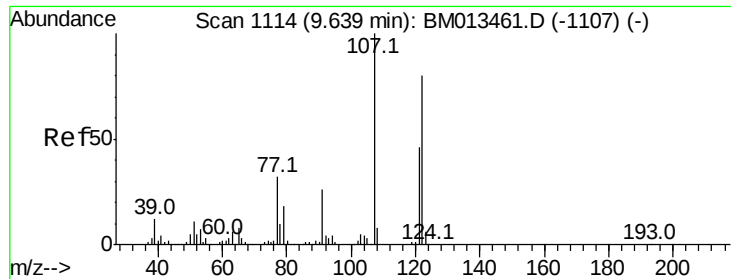
Sohil
12/18/2017 2:09:57 PM



#16
4-Methylphenol
Concen: 8.788 ng/ul
RT: 8.45 min Scan# 912
Delta R.T. 0.00 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Tgt Ion	Ratio	Lower	Upper
108	100		
107	101.0	84.9	127.3





#24

2,4-Dimethylphenol

Concen: 30.324 ng/ul m

RT: 9.65 min Scan# 1116

Delta R.T. 0.01 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

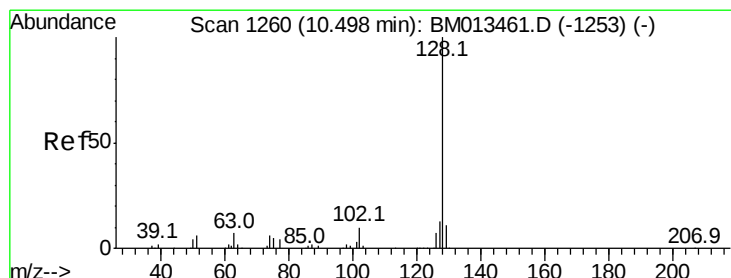
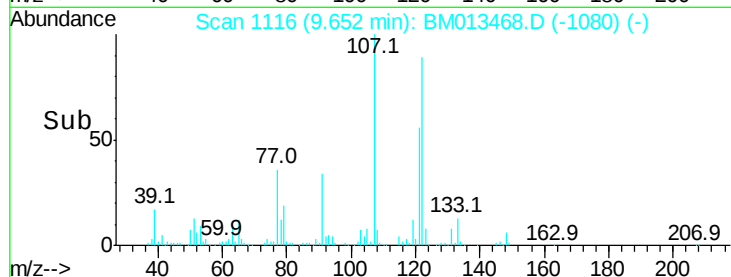
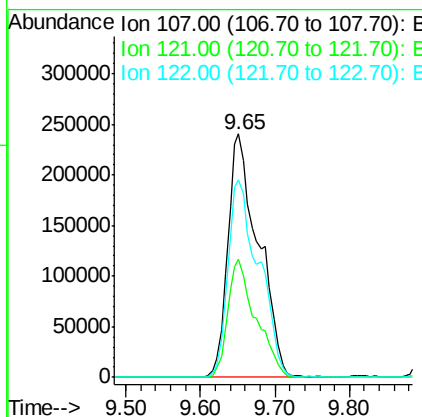
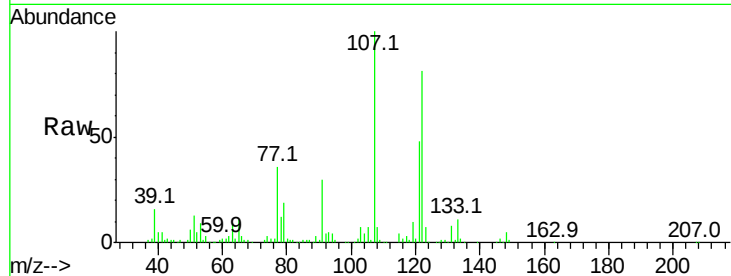
ClientSampleId :

F9A10

Tot Ion:	107	Resp:	686133
Ion Ratio	Lower	Upper	
107	100		
121	48.3	31.9	47.9#
122	81.4	57.8	86.6

Manual Integrations
APPROVED

Sohil
12/18/2017 2:09:57 PM



#28

Naphthalene

Concen: 928.128 ng/ul m

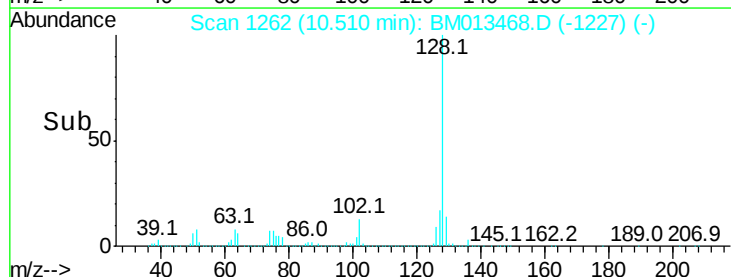
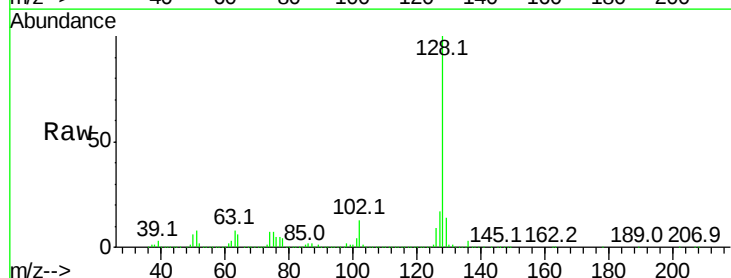
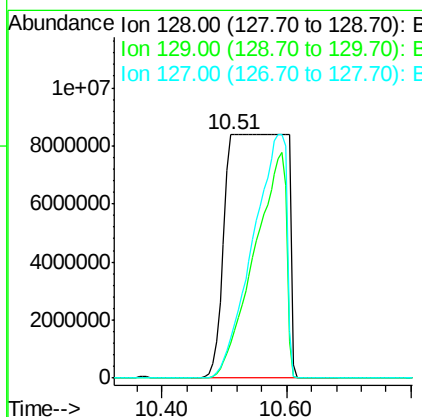
RT: 10.51 min Scan# 1262

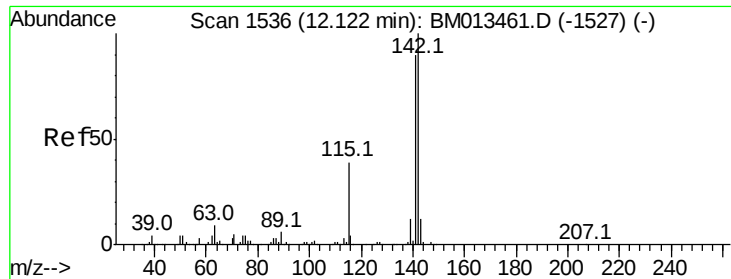
Delta R.T. 0.01 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Tgt Ion:	128	Resp:	56298487
Ion Ratio	Lower	Upper	
128	100		
129	14.3	8.8	13.2#
127	16.5	10.6	16.0#





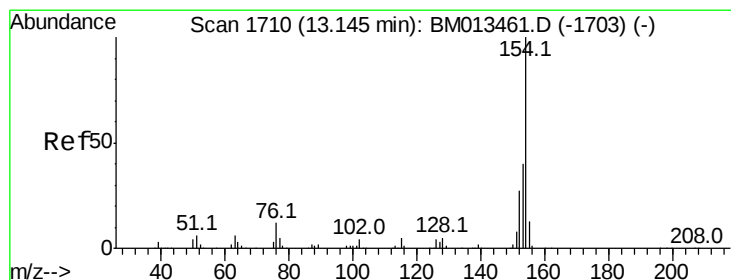
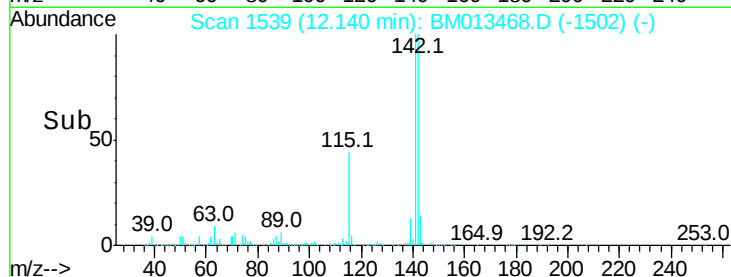
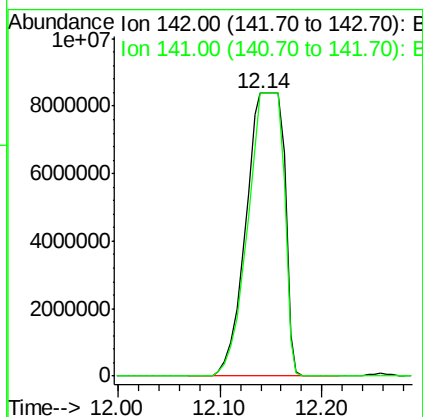
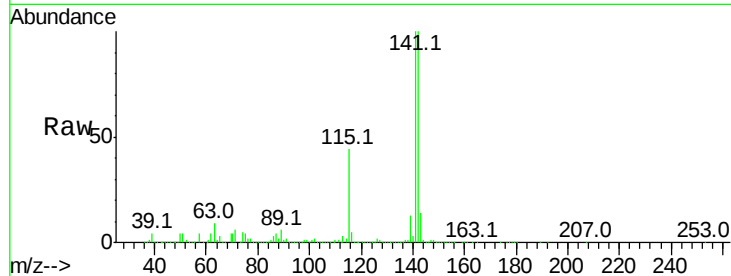
#34
2-Methylnaphthalene
Concen: 477.714 ng/ul m
RT: 12.14 min Scan# 1539
Delta R.T. 0.02 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Instrument :
BNA_M
ClientSampleId :
F9A10

Tot Ion:142 Resp:21782932
Ion Ratio Lower Upper
142 100
141 100.0 74.1 111.1

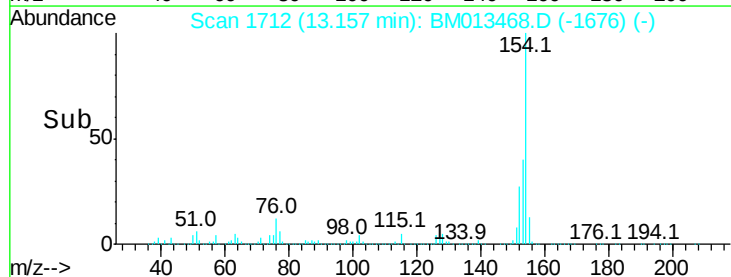
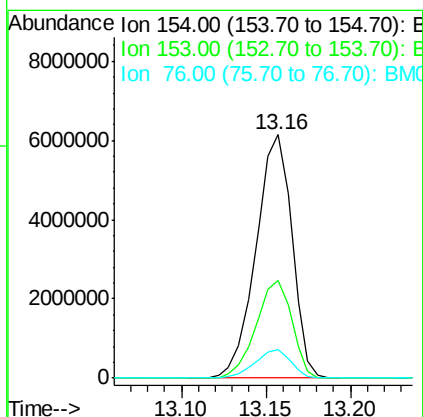
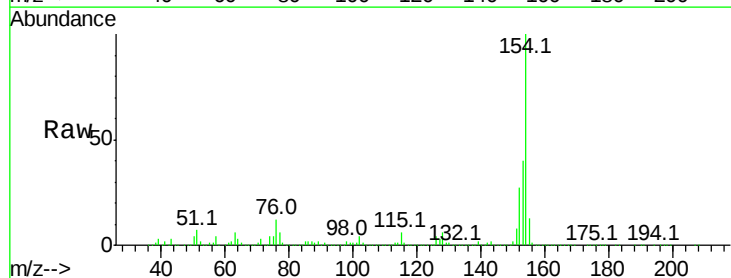
Manual Integrations
APPROVED

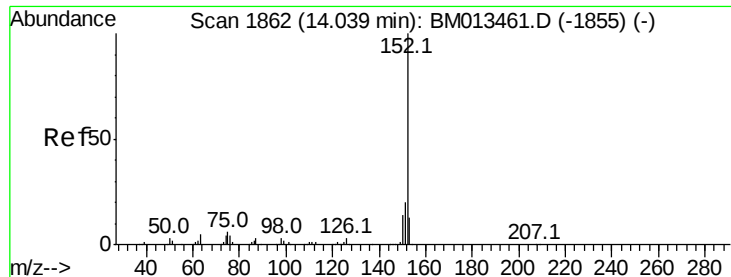
Sohil
12/18/2017 2:09:57 PM



#40
1,1'-Biphenyl
Concen: 149.899 ng/ul
RT: 13.16 min Scan# 1712
Delta R.T. 0.01 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Tgt Ion:154 Resp: 9107373
Ion Ratio Lower Upper
154 100
153 40.3 32.6 48.8
76 11.7 8.5 12.7





#47

Acenaphthylene

Concen: 27.836 ng/ul

RT: 14.05 min Scan# 1863

Delta R.T. 0.01 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampleId :

F9A10

Tot Ion:152 Resp: 2033564

Ion Ratio Lower Upper

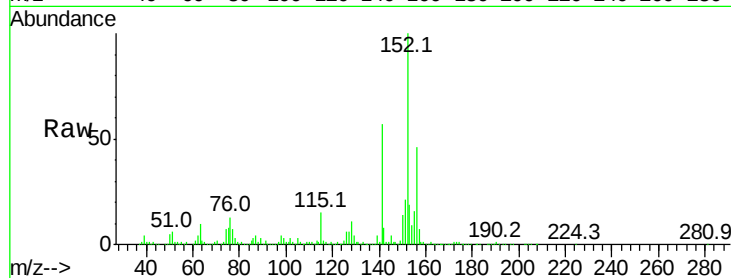
152 100

151 21.0 16.3 24.5

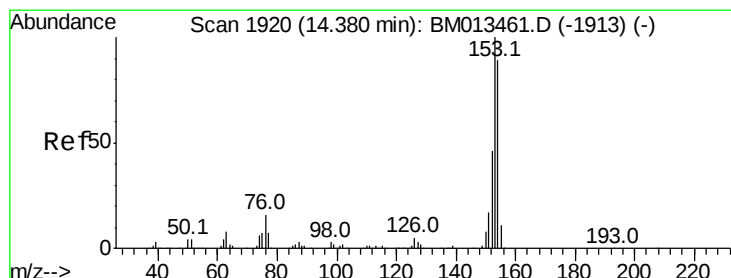
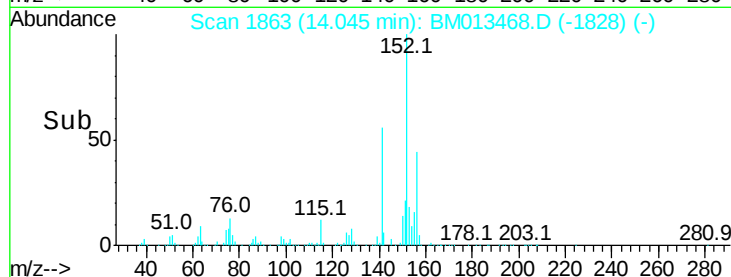
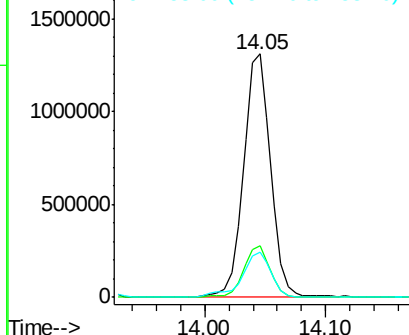
153 18.6 10.2 15.4#

Manual Integrations
APPROVED

Sohil
12/18/2017 2:09:57 PM



Abundance Ion 152.00 (151.70 to 152.70): E
Ion 151.00 (150.70 to 151.70): E
Ion 153.00 (152.70 to 153.70): E



#49

Acenaphthene

Concen: 602.430 ng/ul m

RT: 14.40 min Scan# 1923

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

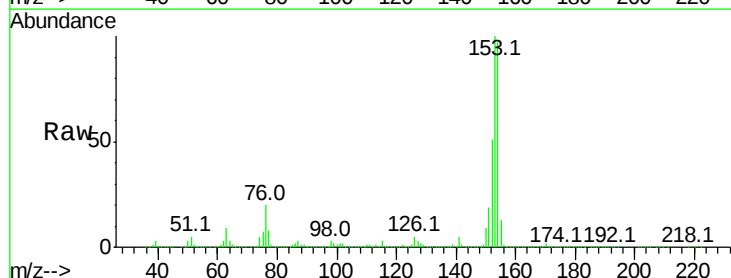
Tgt Ion:153 Resp:29980667

Ion Ratio Lower Upper

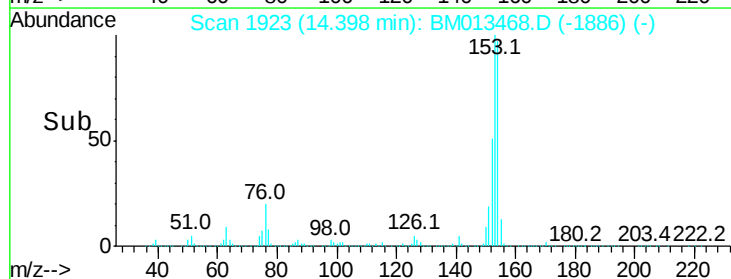
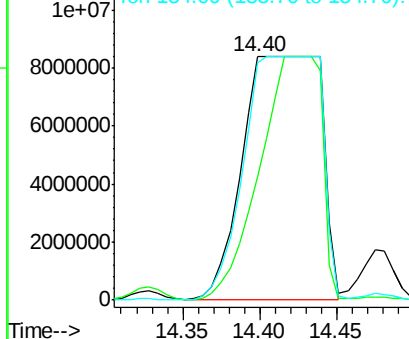
153 100

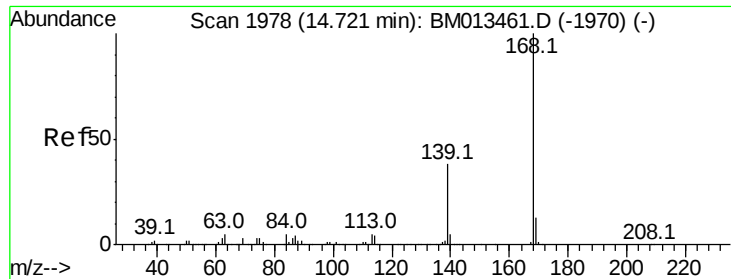
152 50.9 37.6 56.4

154 97.2 70.4 105.6



Abundance Ion 153.00 (152.70 to 153.70): E
Ion 152.00 (151.70 to 152.70): E
Ion 154.00 (153.70 to 154.70): E





#53

Dibenzofuran

Concen: 350.451 ng/ul m

RT: 14.73 min Scan# 1980

Delta R.T. 0.01 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampled :

F9A10

Tot Ion:168 Resp:25747077

Ion Ratio Lower Upper

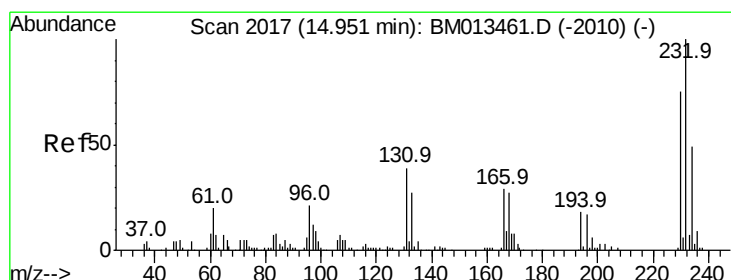
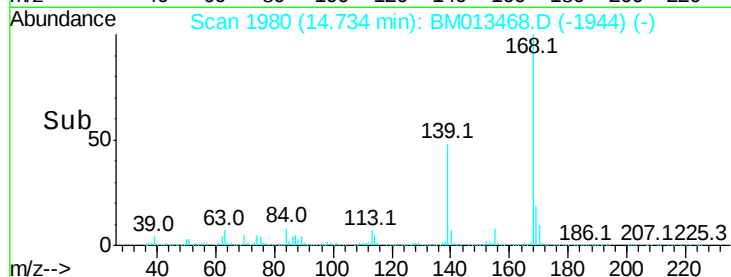
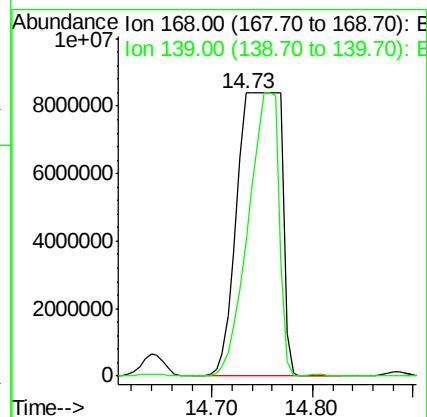
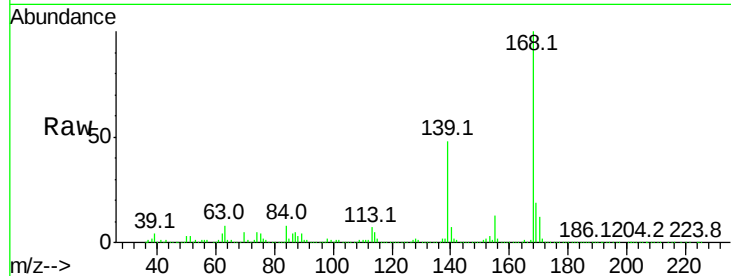
168 100

139 47.9 30.8 46.2#

Manual Integrations
APPROVED

Sohil

12/18/2017 2:09:57 PM



#55

2,3,4,6-Tetrachlorophenol

Concen: 15.689 ng/ul

RT: 14.97 min Scan# 2020

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Tgt Ion:232 Resp: 247115

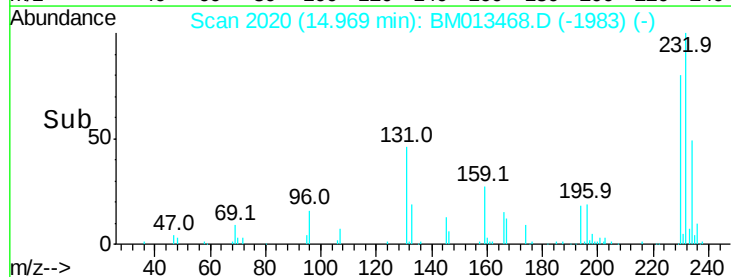
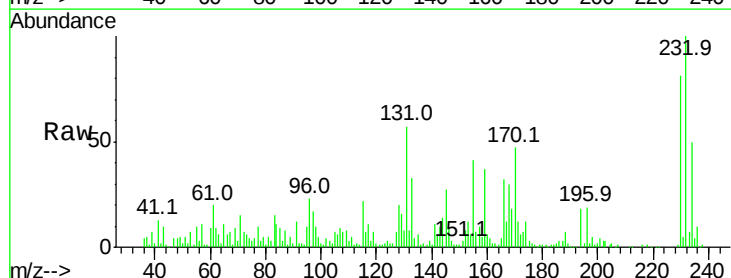
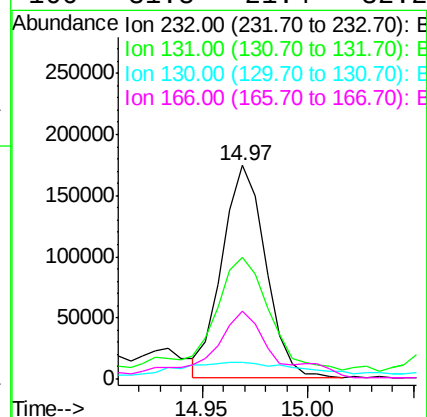
Ion Ratio Lower Upper

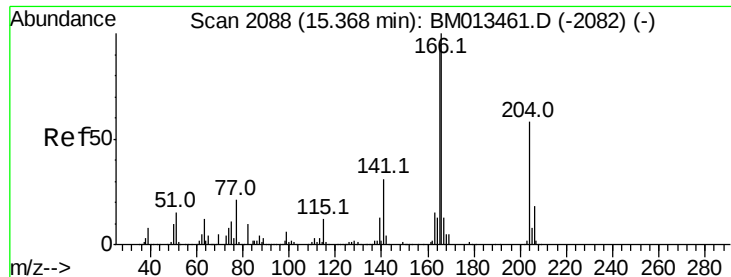
232 100

131 56.8 29.0 43.4#

130 7.7 2.0 3.0#

166 31.8 21.4 32.2





#58

Fluorene

Concen: 464.538 ng/ul m

RT: 15.39 min Scan# 2091

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampleId :

F9A10

Tot Ion:166 Resp:28233764

Ion Ratio Lower Upper

166 100

165 100.0 77.9 116.9

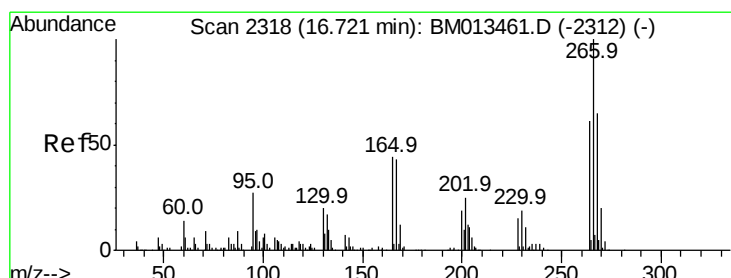
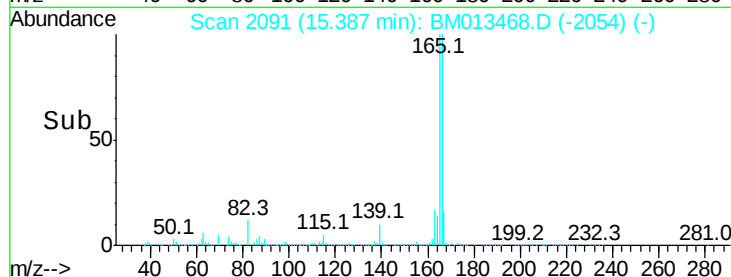
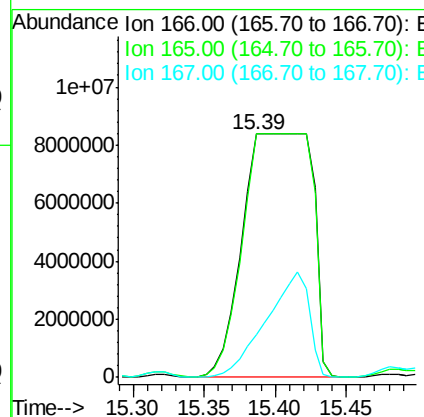
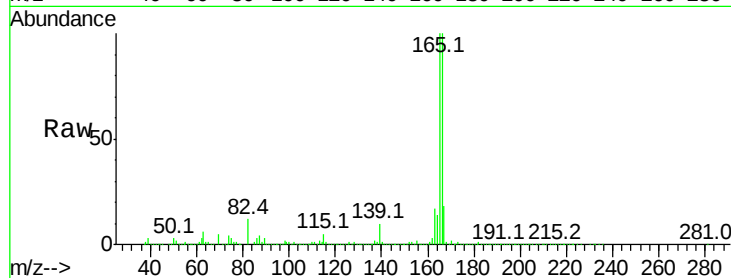
167 17.6 10.6 16.0#

Manual Integrations

APPROVED

Sohil

12/18/2017 2:09:57 PM



#68

Pentachlorophenol

Concen: 1108.521 ng/ul

RT: 16.80 min Scan# 2331

Delta R.T. 0.08 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

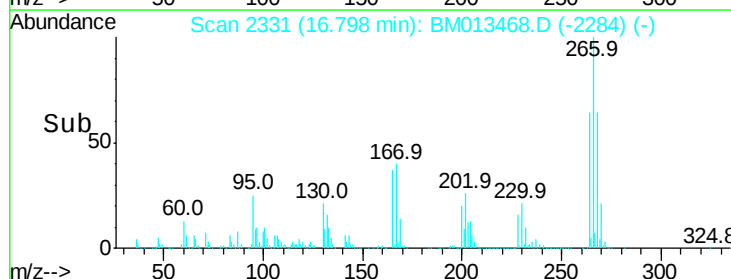
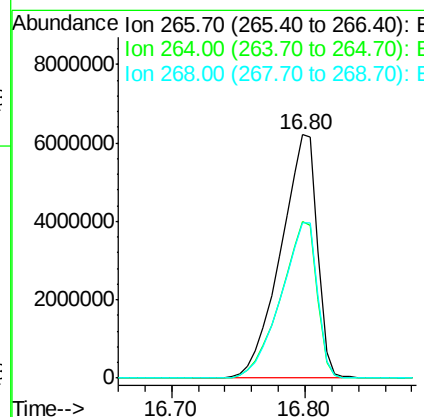
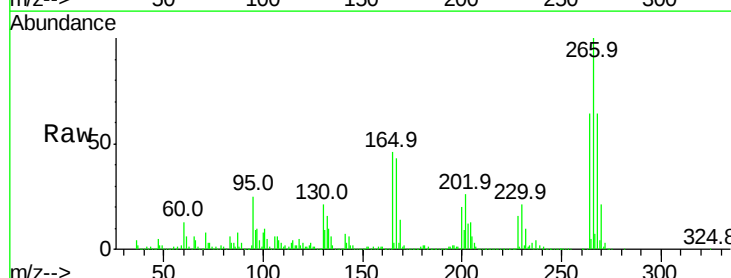
Tgt Ion:266 Resp:11808012

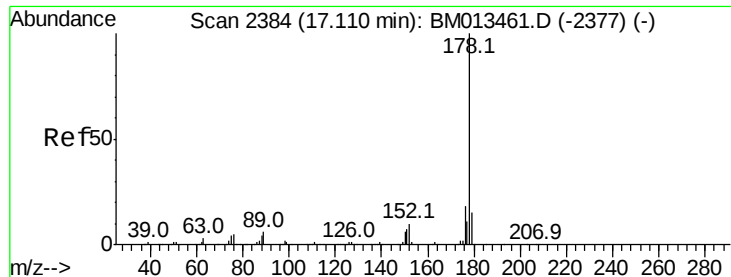
Ion Ratio Lower Upper

266 100

264 64.1 49.3 73.9

268 63.6 52.6 78.8





#69

Phenanthrene

Concen: 701.873 ng/ul m

RT: 17.13 min Scan# 2387

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampleId :

F9A10

Tot Ion:178 Resp:56648939

Ion Ratio Lower Upper

178 100

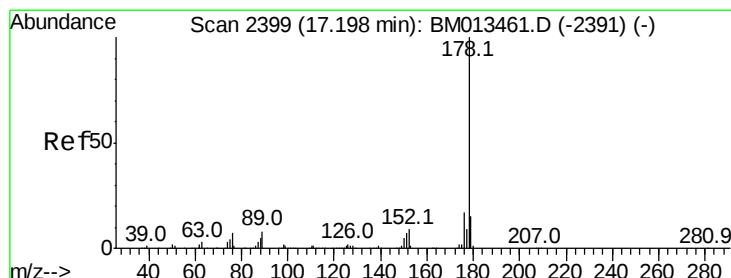
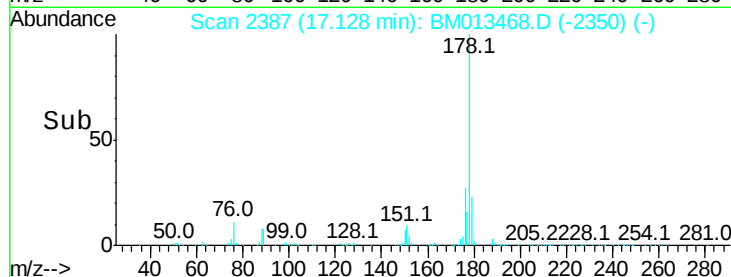
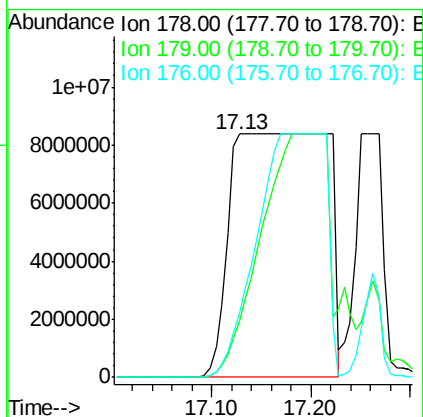
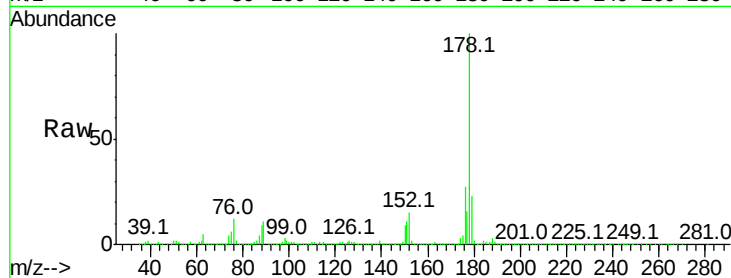
179 23.1 12.6 19.0#

176 26.6 14.9 22.3#

Manual Integrations
APPROVED

Sohil

12/18/2017 2:09:57 PM



#71

Anthracene

Concen: 199.304 ng/ul m

RT: 17.25 min Scan# 2408

Delta R.T. 0.05 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

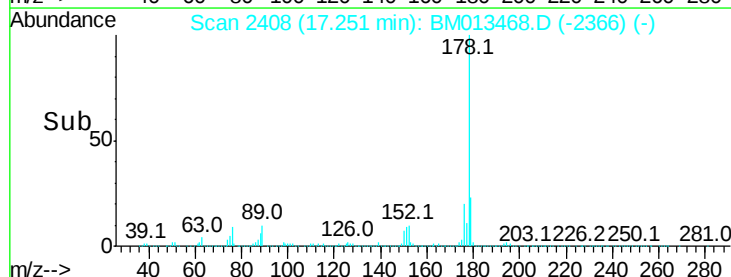
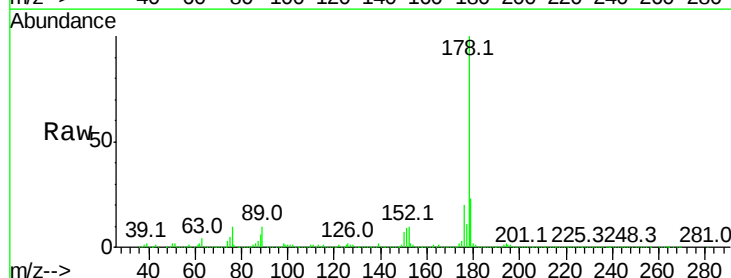
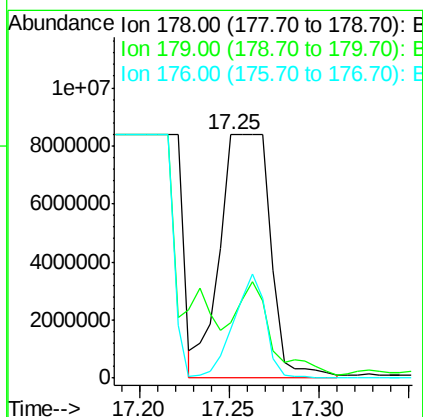
Tgt Ion:178 Resp:16442584

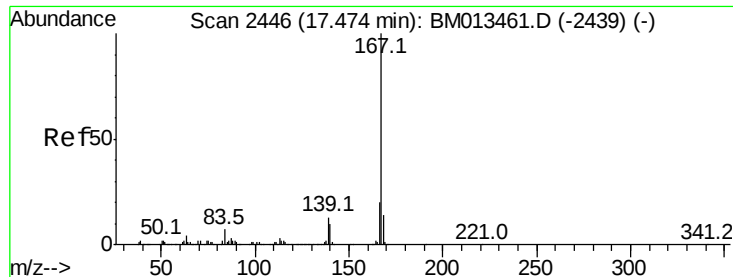
Ion Ratio Lower Upper

178 100

179 22.9 11.7 17.5#

176 20.4 14.6 21.8





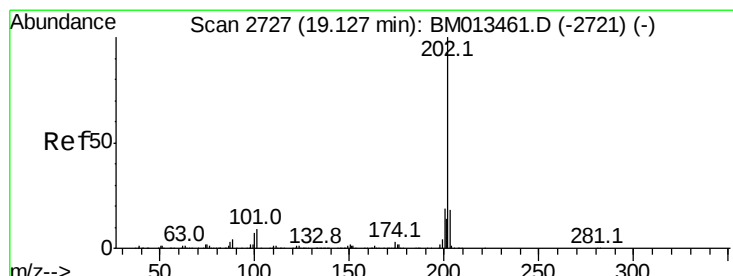
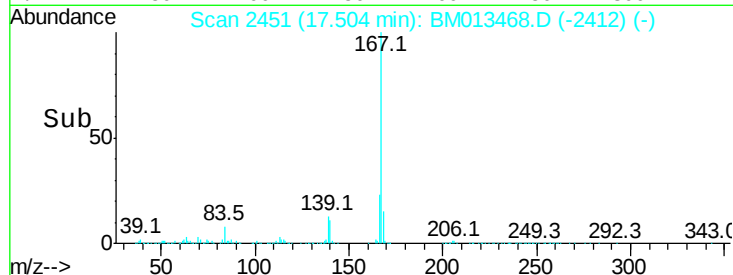
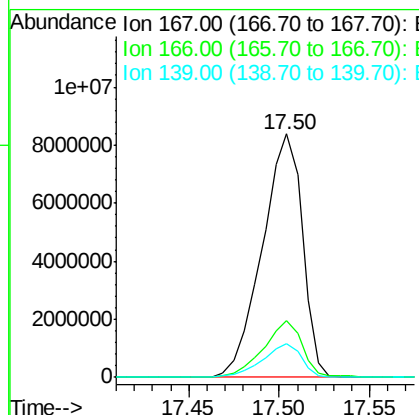
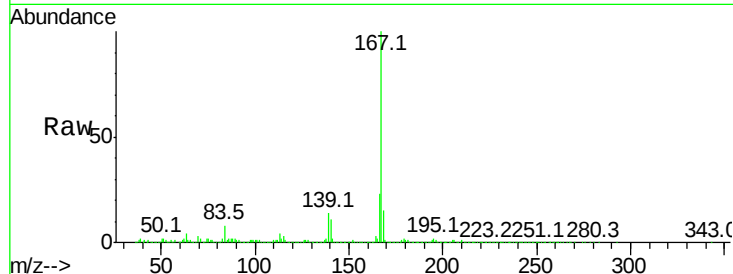
#72
 Carbazole
 Concen: 181.777 ng/ul
 RT: 17.50 min Scan# 2451
 Delta R.T. 0.03 min
 Lab File: BM013468.D
 Acq: 16 Dec 2017 08:48

Instrument :
 BNA_M
 ClientSampled :
 F9A10

Tot Ion:167 Resp:12899182
 Ion Ratio Lower Upper
 167 100
 166 23.2 17.1 25.7
 139 13.9 10.0 15.0

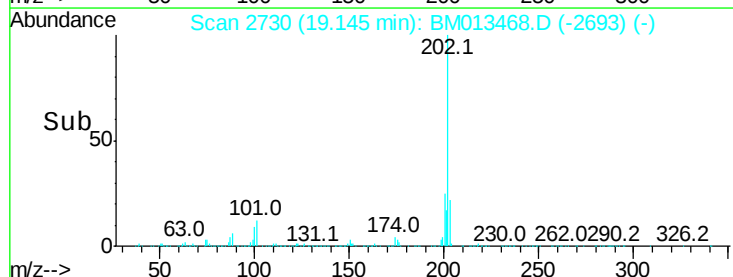
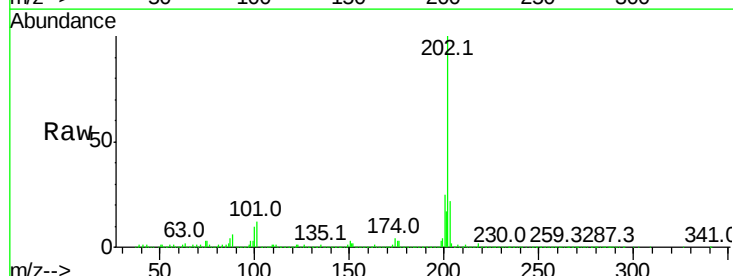
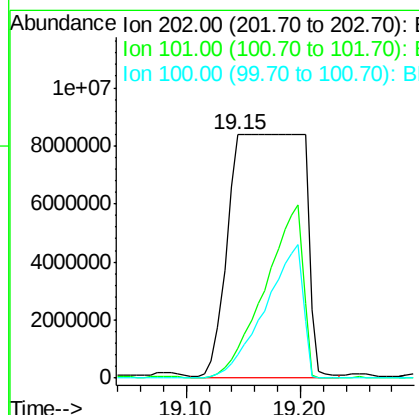
Manual Integrations
 APPROVED

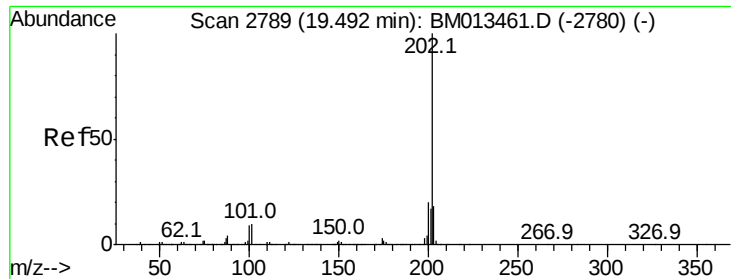
Sohil
 12/18/2017 2:09:57 PM



#74
 Fluoranthene
 Concen: 385.413 ng/ul m
 RT: 19.15 min Scan# 2730
 Delta R.T. 0.02 min
 Lab File: BM013468.D
 Acq: 16 Dec 2017 08:48

Tgt Ion:202 Resp:38120896
 Ion Ratio Lower Upper
 202 100
 101 12.3 4.6 7.0#
 100 9.6 3.4 5.2#





#77

Pvrene

Concen: 523.962 ng/ul m

RT: 19.51 min Scan# 2792

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampleId :

F9A10

Tot Ion:202 Resp:33501709

Ion Ratio Lower Upper

202 100

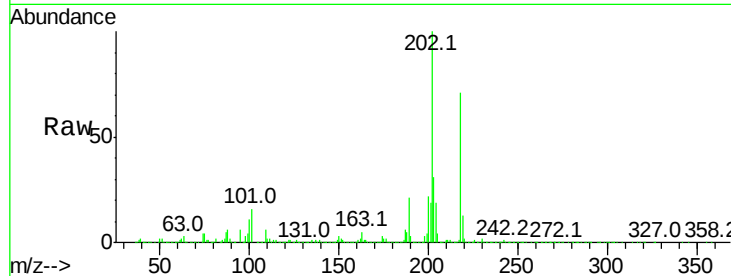
101 15.6 5.1 7.7#

100 10.9 4.9 7.3#

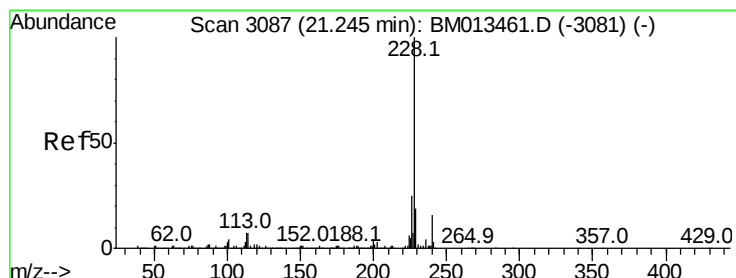
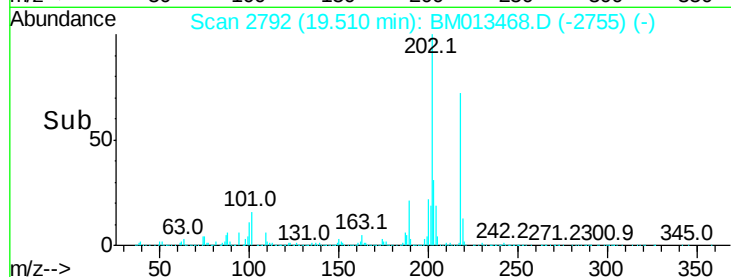
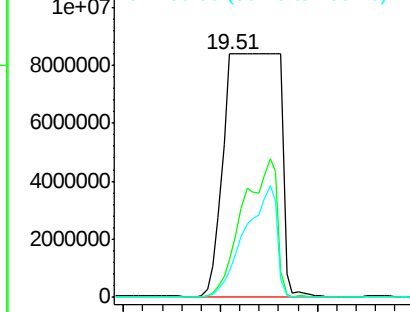
Manual Integrations
APPROVED

Sohil

12/18/2017 2:09:57 PM



Abundance Ion 202.00 (201.70 to 202.70): E
Ion 101.00 (100.70 to 101.70): E
Ion 100.00 (99.70 to 100.70): B



#80

Benzo(a)anthracene

Concen: 206.945 ng/ul m

RT: 21.26 min Scan# 3090

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

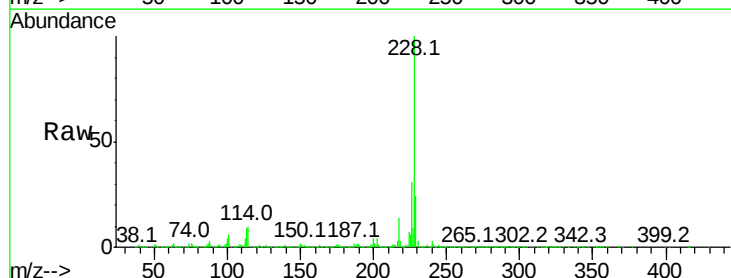
Tgt Ion:228 Resp:13818785

Ion Ratio Lower Upper

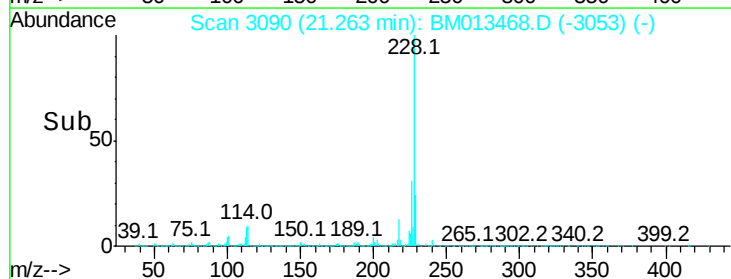
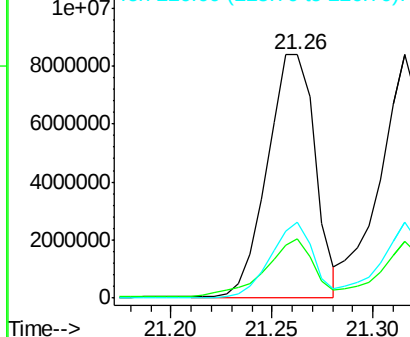
228 100

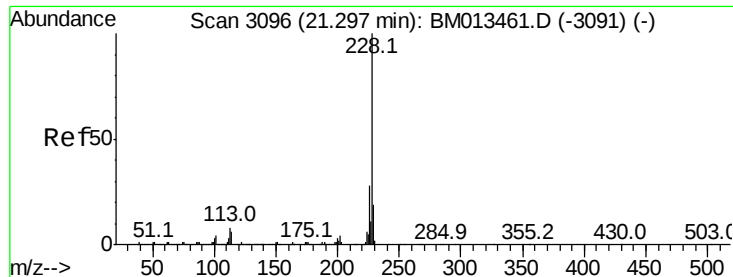
229 24.4 15.4 23.0#

226 31.1 21.4 32.0



Abundance Ion 228.00 (227.70 to 228.70): E
Ion 229.00 (228.70 to 229.70): E
Ion 226.00 (225.70 to 226.70): E





#82

Chrysene

Concen: 193.976 ng/ul m

RT: 21.32 min Scan# 3099

Delta R.T. 0.02 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

Instrument :

BNA_M

ClientSampleId :

F9A10

Tot Ion:228 Resp:12016938

Ion Ratio Lower Upper

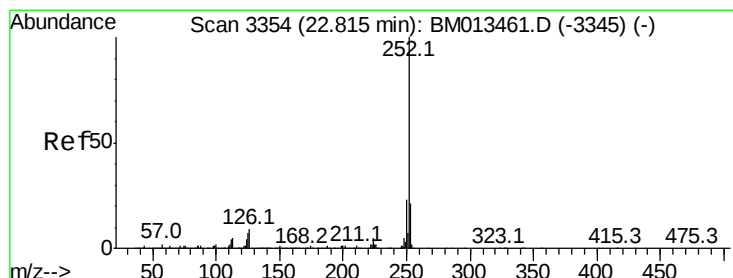
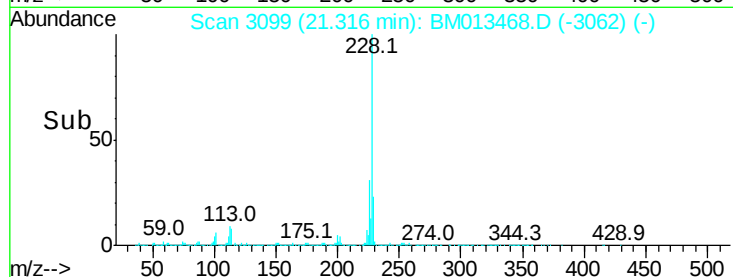
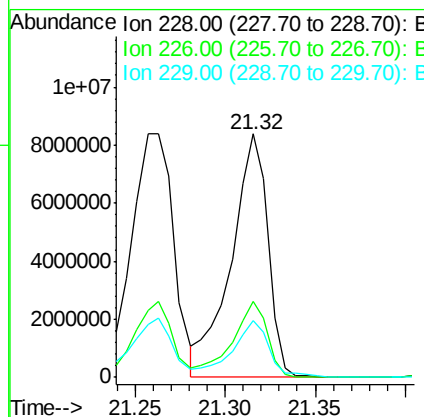
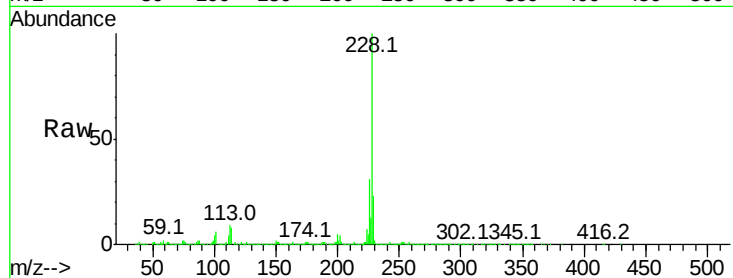
228 100

226 30.9 23.4 35.2

229 23.4 15.5 23.3#

Manual Integrations
APPROVED

Sohil
12/18/2017 2:09:57 PM



#85

Benzo(b)fluoranthene

Concen: 94.933 ng/ul m

RT: 22.83 min Scan# 3356

Delta R.T. 0.01 min

Lab File: BM013468.D

Acq: 16 Dec 2017 08:48

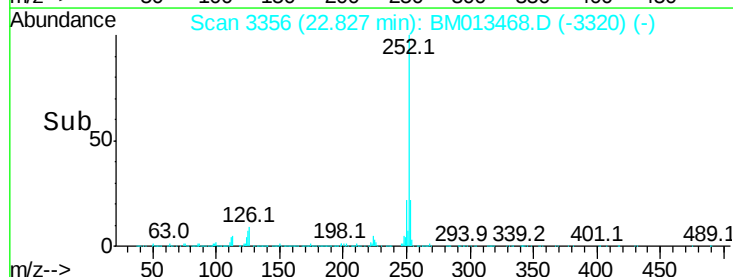
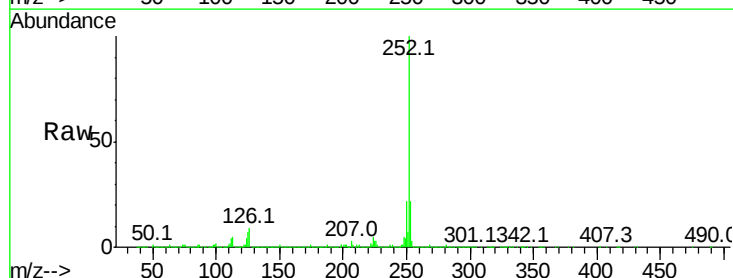
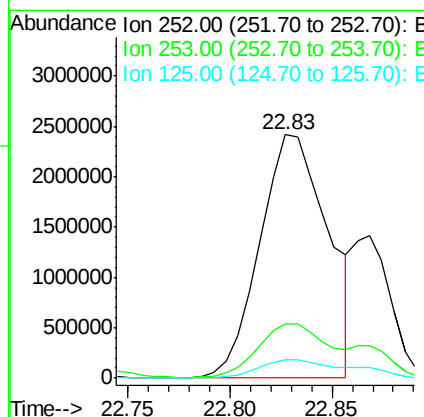
Tgt Ion:252 Resp: 5644642

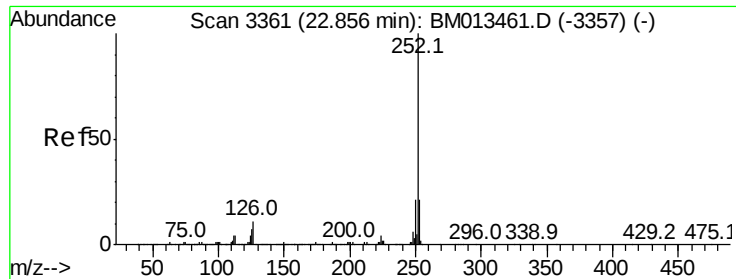
Ion Ratio Lower Upper

252 100

253 22.1 17.9 26.9

125 7.4 3.6 5.4#





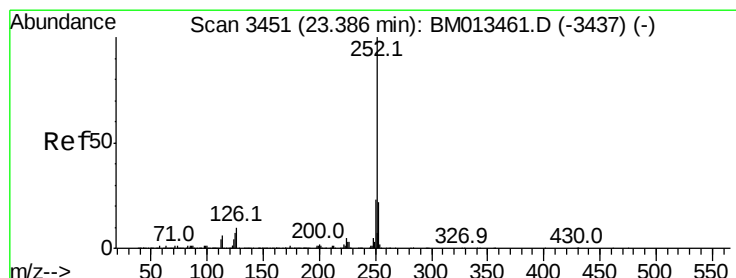
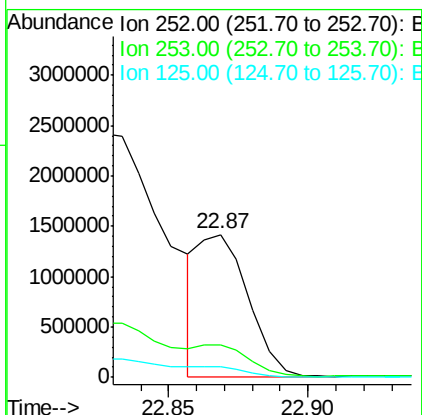
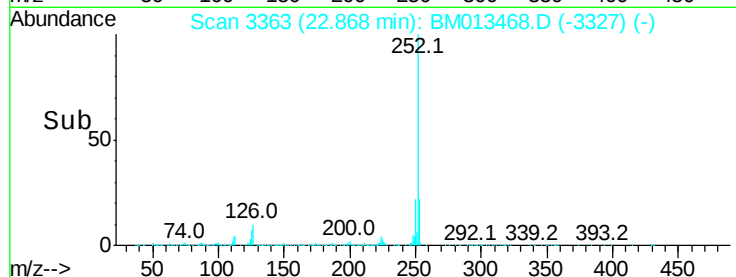
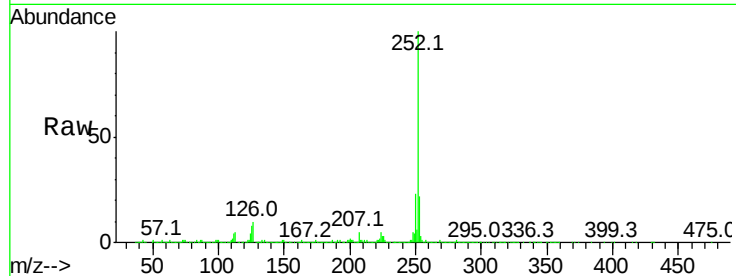
#86
Benzo(k)fluoranthene
Concen: 31.474 ng/ul m
RT: 22.87 min Scan# 3363
Delta R.T. 0.01 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Instrument :
BNA_M
ClientSampled :
F9A10

Tot Ion:252 Resp: 1761115
Ion Ratio Lower Upper
252 100
253 22.5 17.1 25.7
125 7.6 3.4 5.2#

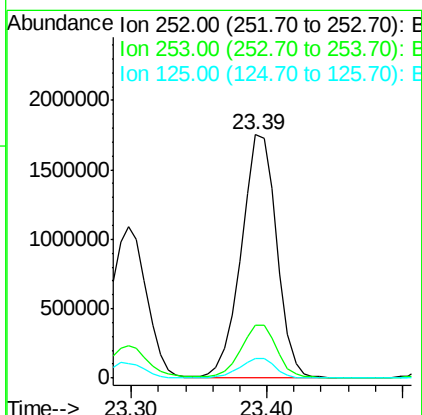
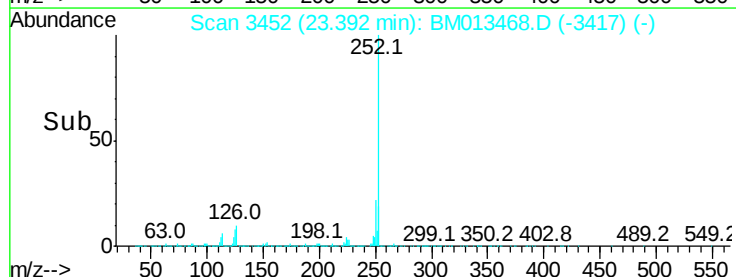
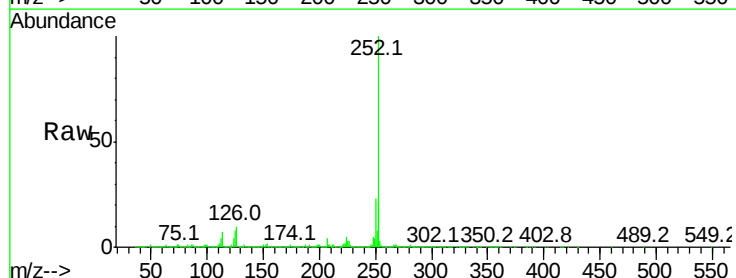
Manual Integrations
APPROVED

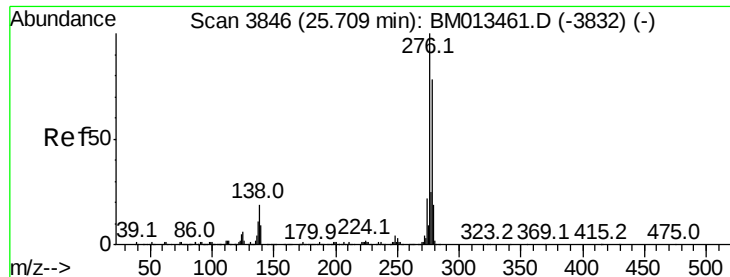
Sohil
12/18/2017 2:09:57 PM



#88
Benzo(a)pyrene
Concen: 59.832 ng/ul m
RT: 23.39 min Scan# 3452
Delta R.T. 0.01 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Tgt Ion:252 Resp: 3195742
Ion Ratio Lower Upper
252 100
253 21.6 18.2 27.2
125 8.3 4.0 6.0#





#89

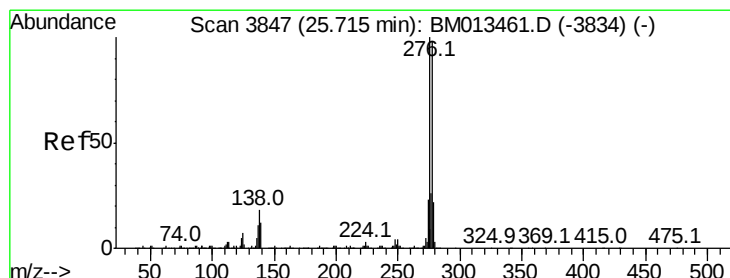
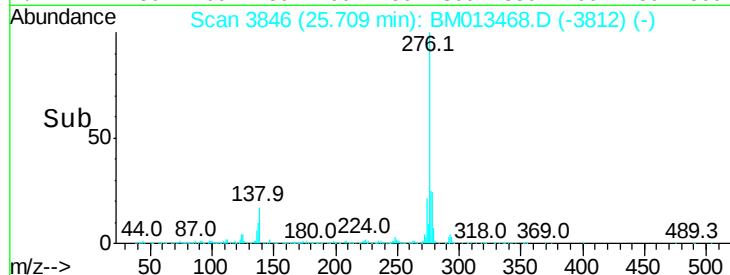
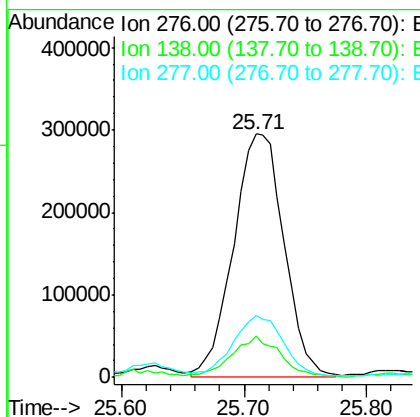
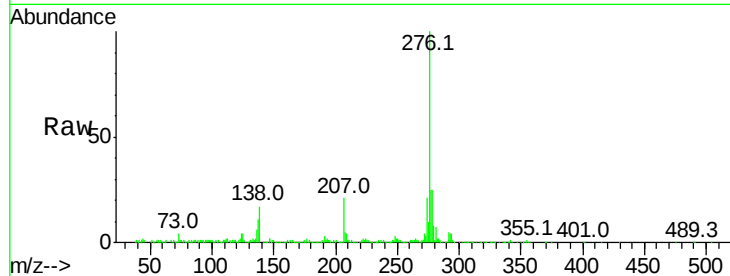
Indeno(1,2,3-cd)pyrene
Concen: 15.978 ng/ul m
RT: 25.71 min Scan# 3846
Delta R.T. 0.00 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Instrument :
BNA_M
ClientSampleId :
F9A10

Tot Ion	Ratio	Lower	Upper
276	100		
138	16.9	9.3	13.9#
277	25.4	19.9	29.9

Manual Integrations
APPROVED

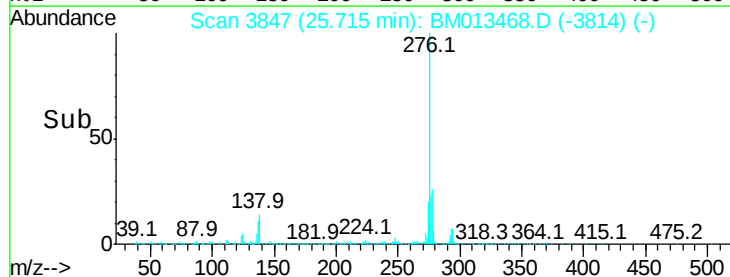
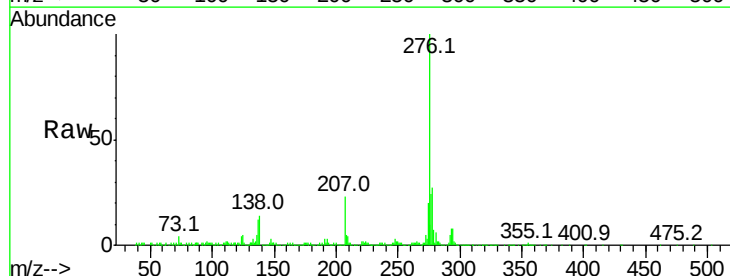
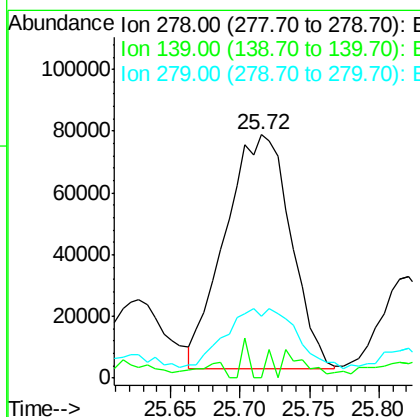
Sohil
12/18/2017 2:09:57 PM

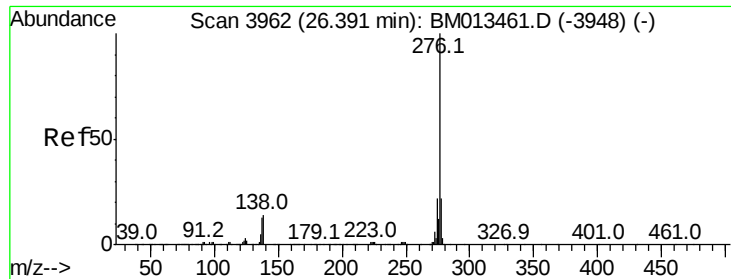


#90

Dibenzo(a,h)anthracene
Concen: 5.535 ng/ul m
RT: 25.72 min Scan# 3847
Delta R.T. -0.01 min
Lab File: BM013468.D
Acq: 16 Dec 2017 08:48

Tgt Ion	Ratio	Lower	Upper
278	100		
139	0.0	5.8	8.8#
279	25.6	18.6	27.8





#91
 Benzo(a,h,i)perylene
 Concen: 15.025 ng/ul m
 RT: 26.40 min Scan# 3963
 Delta R.T. 0.00 min
 Lab File: BM013468.D
 Acq: 16 Dec 2017 08:48

Instrument :
 BNA_M
 ClientSampleId :
 F9A10

Tot Ion	Ratio	Lower	Upper
276	100		
138	14.5	8.5	12.7#
277	23.7	18.6	28.0

Manual Integrations
 APPROVED

Sohil
 12/18/2017 2:09:57 PM

